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ERTS-1 Project No. MMC-298

ARCTIC AND SUBARCTIC ENVIRONMENTAL
ANALYSES UTILIZING ERTS-1 IMAGERY

First Bimonthly Progress Report

23 June - 23 August 1972

Prepared by

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IMAGERY Bimonthly D.M. Anderson, et al
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Accomplishments:

The NASA-USACRREL contractual agreement implementing proposal No. MMC-298 "Arctic and Subarctic Environmental Analyses Utilizing ERTS-1 Imagery", was completed on 23 June. In accordance with this agreement, we have established a state of readiness to receive, process and analyze ERTS-1 data. We have secured photo layout areas and data and image storage facilities. Photographic cataloging procedures have been developed, data handling and analysis techniques refined, mapping scales for several aspects of the investigation, determined, base maps prepared, a literature search and survey made, and supportive reports and photography acquired. A color densitometer was acquired and preliminary analyses for familiarization with the instrument were performed using ERTS-1 simulation imagery.

From August 1 through 10 an initial scene verification mission was conducted over our Alaska test sites. Underflight photographs were acquired and observations of scenes simultaneously imaged by the ERTS-1 during Rev's 30, 155, 169, 183, 197 and 211 were recorded. Results of this mission are being used in the development of interpretive keys in preparation for the analysis of ERTS-1 data.

An abstract of a paper entitled, "Cold Regions Environmental Analysis Based on ERTS-1 Imagery" by R.K. Haugen, L.W. Gatto and D.M. Anderson was prepared and accepted for presentation at the meeting and for publication in the Proceedings of the Eighth International Symposium on Remote Sensing of Environment, to be held 2-6 October 1972 at the University of Michigan. This abstract was prepared in

anticipation of receipt of ERTS imagery, and contains no analysis, findings, or techniques. We will, in accordance with Pars. 20(a) of the NASA-USACRREL contract obtain clearance and approval before presentation of the paper.

Activities planned for the next reporting period (23 August - 23 October 1972) include receipt and analysis of imagery. A short field trip for underflight observation during the changing of seasons in interior Alaska is planned for the month of September. Preparation of the first look report will begin.

Problems: None.

Recommendations:

Up-to-date orbital tracking data should be provided via the ERTS-1 Investigators' Bulletin as soon as possible.

Changes in Standing Order Forms: None; but changes contemplated.

ERTS Image Descriptor Forms: Not applicable; imagery not yet received.

Data Request Forms Submitted: 16 August 1972; request for color composite products of three images from orbit number 30.